

REMARKS/ARGUMENTS

Claims 1-20 are pending in this application. In this amendment, claim 1 has been amended to incorporate the subject matter of original claim 6. In addition, claim 1 is further amended to correct “tank treatment” to “treatment tank” in the third line of the claim. Claim 6 is thus canceled without prejudice or disclaimer due to the amendment to claim 1. Claim 13 has been amended to correct its dependency from claim 1 to claim 10. Claim 16 has been amended to incorporate therein the subject matter of claim 17 and claim 17 is, accordingly, canceled without prejudice or disclaimer. Additionally, claim 18 has been amended to correct the dependency of that claim from claim 15 to claim 16. Furthermore, new claim 21 has been added. Both the claim amendments and the new claim are completely supported by the application as originally filed and thus there is no issue of new matter. Entry of this Amendment is, therefore, respectfully requested. Upon such entry, claims 1-5, 7-16 and 18-20, as amended, and new claim 21 will be pending in this application.

Claim Rejections Under 35 U.S.C. §112

Claims 13 and 18 are rejected under 35 U.S.C. §112, second paragraph. These rejections are respectfully traversed.

According to the Office Action, the word “tanks” in claim 13 lacks antecedent basis. As noted above, the dependency of claim 13 has been corrected from claim 1 to claim 10 which, in turn, directly depends from claim 1. Claim 10 refers to “the treatment tank” and “the at least one pump circulation tank” (as are initially recited in claim 1). Thus the claimed device comprises at least two “tanks”. Applicant therefore submits that the recitation of “outside the tanks” in claim 13 is believed to be perfectly appropriate since the language of claims 10 and 1 provides the required antecedent basis for “tanks”. The Examiner is thus requested to reconsider and withdraw the §112, second paragraph, rejection of claim 13.

Further according to the Office Action, the recitation of “the method” in claim 18, line 1 lacks an antecedent basis. In response, the dependency of claim 18 has been changed from claim 15, which is directed to a device, to claim 16, which recites the method of the invention. This

amendment is believed to overcome the ground for rejection. The Examiner is thus respectfully requested to reconsider and withdraw the rejection of claim 18 under §112, second paragraph.

Claim Rejections Under 35 U.S.C. §103

Claims 1-20 are rejected under 35 U.S.C. 103(a) over the combined disclosures of U.S. Patent No. 5,932,025 to Sylvain, U.S. Patent No. 6,427,706 to Wissmann et al., U.S. Patent No. 5,566,694 to Pugh et al., U.S. Patent Application Publication No. 2004/0099292 of Volz et al. and U.S. Patent No. 5,579,788 to Ammermann et al. The Examiner's reasons in support of these rejections is set forth at pps. 2-7 of the Office Action. These rejections are respectfully traversed.

First, with regard to the Examiner's rejection of claims 1-15 and 20 directed to a device for effecting continuous treatment of a metal strip by means of a treatment liquid, applicant has amended claim 1, i.e, the only original independent claim to the device, to incorporate therein the subject matter of original claim 6. Thus, as amended, claim 1 now recites that the device comprises, *inter alia*, a contact surface between the treatment tank and the at least one pump circulation tank, wherein the contact surface comprises a seal.

The Examiner alleges at p. 5 of the Office Action that the main feature of claim 6, i.e, the seal, is disclosed in USP 5,932,025 to Sylvain (citing to Fig. 3 and col. 3, lines 11-15). Applicant respectfully disagrees with this assertion. What is taught by Sylvain is an external metallic enclosure (3) covered, on its inside, with a coating (31) of refractory and acid-resistant material, with the interposition of a sealing layer (32), for instance of rubber. This arrangement, however, does **NOT** provide a seal between a circulation tank and a treatment tank as is specifically recited in applicant's claim 1 as now amended.

As taught by applicant, it is particularly important in the present invention to ensure a gas-tight connection between the circulation tank and the treatment tank (see, for example, p. 4, lines 19-23 of applicant's specification). This is particularly important in instances where the treatment tank is emptied for maintenance and the treatment fluid must thus be stored in the circulation tank. Sylvain, in contrast to the present invention, however, evinces no recognition of the problems inherent in the exposure of workers to volatile vapors, while this problem has been

both recognized by the applicant and solved by means of the claimed sealing arrangement which, as demonstrated above, is not taught or even suggested by Sylvain.

Since, as demonstrated, Sylvain does not suggest to one of ordinary skill in the relevant art the claimed means for sealing between the treatment tank and the at least one pump circulation tank, applicant respectfully submits that Sylvain should be removed as a reference against his amended claims. Further, even if Sylvain is retained, the combination of that reference with the remaining references cited by the Examiner would neither teach nor suggest the invention as presently recited in claim 1. Thus, the Examiner is respectfully requested to reconsider and withdraw the rejection of claim 1.

Furthermore, as claims 2-15 and 20 all depend, directly or indirectly, on claim 1 and thus they contain all of the recitations found in that claim, these dependent claims are also believed to be distinguishable over the cited combination of references for the same reasons as claim 1. The rejection of claims 2-15 and 20 under §103 should, thus, also be withdrawn.

Further to the above, applicant has added in this Amendment a new independent claim to the device of the invention, i.e, claim 21. This claim also distinguishes the invention over the combination of references cited by the Examiner to reject claims 1-20 for the reasons which follow.

Claim 21 essentially incorporates the subject matter of original claims 1 and 13. As taught in applicant's specification, the arrangement described in claim 13 plays an important role in maintaining a gastight connection between the treatment tank and the at least one pump circulation tank. Thus, as indicated above, the pickling fluid may be removed, when necessary (i.e., when carrying out an emergency repair or in the case of a process disturbance), from the treatment tank and stored safely in the at least one pump circulation tank without danger to any nearby personnel due to fumes which may otherwise escape from the pump circulation tank(s).

In the Office Action (see p. 6), USP 5,579,788 of Ammermann et al. is cited against claim 13. The sealing device described in the '788 patent, however, does not separate a treatment tank from a circulation tank (which circulation tank may also serve as a storage tank in the case of a process disturbance) - such as in the case of the arrangement recited in applicant's new claim 21. Ammermann et al., in fact, does not even disclose the use of a circulation tank. Furthermore, the

sealing device disclosed in the subject reference is of a completely different design than that presently cited in applicant's claim 21.

For the reasons above, therefore, claim 21 is also believed to distinguish applicant's invention over the combination of references cited to reject claims 1-20. The allowance of claim 21 is, therefore, also respectfully requested.

The following discussion refers to claims 16-19 that are directed to the method of applicant's invention. These claims, also, are rejected over the combination of the five (5) references noted above. Claim 17 is canceled without prejudice or disclaimer and thus the rejection of that claim is moot. The rejection of claims 16 and 18-19 is respectfully traversed.

In response to the rejection of the method claims, independent method claim 16 has been amended to incorporate therein the subject matter of original claim 17. Thus, as now amended, claim 16 recites that **both** the treatment tank and the circulation tank are equipped with a sloped bottom which thus permits quick and complete emptying of the treatment liquid contained within the entire system. Such quick and complete emptying of the complete system provides a particular advantage in minimizing system "downtime" on occasions when a process disturbance occurs. That is, when the process must be suspended to permit repairs due to a system disturbance, it is advantageous to minimize, as much as possible, the time the system is inoperative. One means to obtain this end is to permit the system to be emptied of treatment liquid as rapidly as possible, i.e, due to the sloped bottom found in **both** the treatment tank and the circulation tank. None of the prior art references cited, in combination, to reject applicant's method claims take this issue into account, neither do they teach, or even suggest, the methodology claimed by applicant for obtaining the ends described above.

For the reasons above, therefore, the Examiner is respectfully requested to reconsider and withdraw the rejection of independent method claim 16. Moreover, since claims 18 and 19 (as amended) both depend from claim 16 and thus include all of the features recited in the subject claim, the dependent claims are also deemed to be distinguishable and their rejection should also thus be withdrawn.

Summary

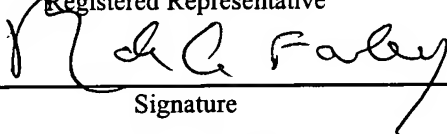
In light of the claim amendments and the remarks provided above, applicant submits that all of the grounds for rejecting the claims as set forth in the present Office Action regarding this application are believed to have been overcome.

If, however, the Examiner believes that an interview would advance the prosecution of this case, he is respectfully invited to telephone applicant's representative at the number below in order that such an interview can be arranged.

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on: October 18, 2006

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Name of applicant, assignee or
Registered Representative

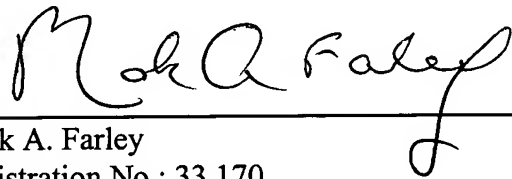


Signature

October 18, 2006

Date of Signature

Respectfully submitted,



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